Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Natchez-Adams School District

> Prepared By: Charles Wellborn MFC

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-01-24

Plan Type: Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: 5-T7N-R3W

TABLE OF CONTENTS

LANDOWNER INFORMATION	3
FORESTER INFORMATION	3
DISCLAIMER	3
INTRODUCTION	3
OBJECTIVES	4
PROPERTY DESCRIPTION	4
SOIL TYPES	6
GENERAL PROPERTY RECOMMENDATIONS	7
STRATA	8
PLAN MAP	15
PLAN MAP	16
STRATA ACTIVITY SCHEDULE	17

LANDOWNER INFORMATION

Organization: Natchez-Adams School District
Name: Natchez-Adams School District

Mailing Address: P.O. Box 1185

City, State, Zip: Natchez, MS 39120 Country: United States of America

Contact Numbers: Home Number:

Office Number: 601-445-2815

Fax Number:

E-mail Address:

Social Security Number (optional):

FORESTER INFORMATION

Name: Charles Wellborn, Adams-Wilk. Service Forester

Forester Number: 00446 Organization: MFC

Street Address: 75C Carthage Point Rd. City, State, Zip: Natchez, MS 39120

Contact Numbers: Office Number: 601-442-0472

Fax Number:

E-mail Address: cwellborn@mfc.state.ms.us

PROPERTY LOCATION

County: Adams Total Acres: 3001 Latitude: -91.45 Longitude: 31.6

Section: 5 Township: 7N Range: 3W

DISCLAIMER

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone.

PROPERTY DESCRIPTION

General Property Information

Although the school land that is located on what is called Giles Island is located in several sections, it is commonly referred to as Section 5, Township 7 North, Range 3 West. It contains about 3,001 acres that is school trust land. The remainder of the island, which contains about 9,000 acres, belongs to Mr. Speed Bancroft. Giles Island was formed when the U. S. Army Corps of Engineers cut a straight channel to cut off the approximately 17-mile loop in the Mississippi River just north of Natchez. This put Giles Island on the western side of the Mississippi River.

Access to the island is good when the river is below about 30 feet on the Natchez gage. This access is all across private land that belongs to Mr. Paul Meng and a small part that belongs to Mr. Bancroft. Mr. Bancroft put a large culvert in the old river chute in 1996 that was on their property. This is the only access by land. When the river is high, the island is only accessible by boat. At the present time, we are not able to sell timber on Giles Island because Mr. Meng wants to charge a high price for loggers to haul timber across his land. This problem has been referred to the attorney of the Adams County School Board.

This section is directly affected by the Mississippi River since it is bordered on three sides by the river and the old river channel. The topography is typical for river bottom land, with several lakes and sloughs with ridges and flats between them. According to the records, most of the island had been cut over by 1948. When one of the old plans was written in 1987, the two major forest types were cottonwood and willow. Much of the overmature cottonwood has been removed. Major species now include pecan, cottonwood, sycamore, hackberry, ash and other miscellaneous species. The willow forest type still exists between the old bank of the Mississippi River and the old river lake.

A windstorm damaged a large amount of timber on the island in 2008. We had a salvage sale, but were not able to sell it because of the problem with hauling timber across Mr. Meng's land. Therefore, the volumes of timber on the island will be different than the last

time we did a cruise. The timber that was damaged is probably not able to be salvaged at this time.

Archeological or Cultural Resources

The duel that Jim Bowie was involved in, called the Jim Bowie Sandbar Fight, occurred on what is now the school land on Giles Island on September 19, 1827. This was where the first sandbar north of Natchez was located. Mr. Speed Bancroft and the Mississippi Department of Archives and History had wanted to put a historical marker on the site in 1993, but the river was always too high to get to it. Mr. Bancroft put a marker on his own property which says that it is four miles west of the actual site. According to the maps I have seen, the actual site would have been located at the intersection of what the hunting club calls Bowie Boulevard and the Slave Levee Road in Strata 8.

Water Resources

Flat Lake and Marengo Lake are the largest lakes on the school section. There are numerous other sloughs and smaller lakes on the section. This section is bordered on the east by the Mississippi River, on the south by Old River Lake and in places on the north, by the Old River Chute. Intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices.

Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of your property.

Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property:

SOIL TYPES

Convent

The Convent component makes up 41 percent of the map unit. Slopes are 0 to 2 percent. This component is on natural levees, flood plains. The parent material consists of alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The Bruin component makes up 31 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

Bruno

The Bruno component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on natural levees. The parent material consists of sandy alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 60 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3s. This soil does not meet hydric criteria. Loblolly Site Index = 93.

Sharkey

The Sharkey component makes up 44 percent of the map unit. Slopes are 0 to 2 percent. This component is on backswamps. The parent material consists of clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is very high. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The Tunica component makes up 33 percent of the map unit. Slopes are 0 to 2 percent. This component is on alluvial plains. The parent material consists of clayey alluvium derived from sedimentary rock over loamy alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is frequently flooded. It

is not ponded. A seasonal zone of water saturation is at 27 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria.

Water

Generated brief soil descriptions are created for major soil components. The Water area is a miscellaneous area.

Robinsonville

The Robinsonville component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of loamy alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 60 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy, vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- · Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines

for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

Boundary Lines

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

Boundary lines were last painted in 2010. Boundary lines are scheduled to be painted every four years. They are scheduled to be painted in 2014 and 2018.

Note: Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

STRATA

Strata 1
Strata Description
Strata 1: Stand 33

Acres: 344

Cottonwood, pecan, willow and hackberry, along with other species, can be found on this strata. Approximately 100 acres on the northern part of this strata is part of an old sandbar. The soils are very sandy and contain only scattered honey locust and hackberry. A large part of this area is still open due to the sandy soils. A timber sale was conducted on this strata in 1991 which brought \$71,500.00 for the schools. The southern portion of this strata, which borders Old River Lake, contained a pure stand of willow and was clearcut since the stand was declining. It was planned that the area would regenerate naturally to willow. This has not happened yet and the area is still open. This is probably because this area stays flooded by Old River Lake most of the year.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

An intermediate cut or thinning should be conducted in FY 2015 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow. The sale will probably not be as big as the whole strata, because the sandbar part does not have merchantable timber and the willow will probably not be cut.

Strata 2
Strata Description
Strata 2: Stand 4

Acres: 182

This area contains about 182 forested acres and about 17 acres in Flat Lake. This area was clearcut in 1970, except for a few scattered pecan seed trees. This was successful and today the stand is primarily pecan, with cottonwood, sycamore, hackberry and other species mixed in. Unfortunately many of the pecan trees were blown down in the windstorm in 2008 and we were not able to salvage them.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees

and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

An intermediate cut or thinning should be conducted in FY 2014 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow.

Strata 3
Strata Description

Strata 3: Stands 11 and 12

Acres: 97

Most of this strata is located between Marengo Lake and Flat Lake. About 24 acres is in Marengo Lake. Before the windstorm, this strata was about 80 percent pecan, with some cottonwood and box elder. This was one of the best stands on the island.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

An intermediate cut or thinning should be conducted in FY 2013 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow.

Strata 4
Strata Description
Strata 4: Stand 30

Acres: 312

This strata borders Old River Lake on the southside. This southside has an almost pure stand of willow between Old River Lake and the old bank of the Mississippi River. This area is flooded most of the year. Most of the willow is poor quality due to excessive flooding which causes the trees to sprout water roots which form knots. The northern part of this strata is pecan, sycamore, cottonwood and box elder. The growth rate of this stand is poor.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

An intermediate cut or thinning should be conducted in FY 2018 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow. The sale would not be as large as the 312 acres in the strata.

Strata 5
Strata Description
Strata 5: Stand 18

Acres: 260

Flat Lake and Marengo Lake take up about 18 acres of this strata. According to the records, partial cuts were made in 1967 and 1978. This area contains a good stand of cottonwood, pecan, ash, sycamore, hackberry and miscellaneous species. Before the windstorm the highest volume was in pecan and cottonwood.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

An intermediate cut or thinning should be conducted in FY 2016 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be

removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow.

Strata 6
Strata Description
Strata 6: Stand 28

Acres: 450

A good stand of pecan, sycamore, hackberry, cottonwood, cypress, willow and other miscellaneous species occupy this strata. An intermediate cut was made on the north part of this area in 1995 that brought \$57,950.00 for the schools. An intermediate cut was made on the south part of the area in 1996 that brought \$84,720.00.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

An intermediate cut or thinning should be conducted in FY 2017 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow.

Strata 7
Strata Description
Strata 7: Stand 26

Acres: 406

There are about 34 acres in lakes and sloughs. Sycamore and pecan are the predominate species in the stand. Other species include hackberry, ash, cypress, willow, box elder and other miscellaneous species. A timber sale was conducted in 1994 which brought \$95,764.00 for the schools. Most of the trees cut were the overmature cottonwoods and willows.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

An intermediate cut or thinning should be conducted in FY 2018 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow.

Strata 8
Strata Description

Strata 8: Stand 21

Acres: 366

This strata has about 366 acres that are forested and about two acres in small lakes. Predominate species in the stand are cottonwood, sycamore and pecan. Other species include hackberry, ash, willow, overcup oak and miscellaneous species. Growth rate of the stand is fair.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

An intermediate cut or thinning should be conducted in FY 2014 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow.

Strata 9 Strata Description Strata 9: Stand 25

Acres: 144

This is the highest ground on the school section since it is close to the Mississippi River bank. The river is the eastern boundary of this strata. Actually, the northeast corner of this section is in the river. A timber sale was conducted in 1987 in which the overmature cottonwood, pecan and sycamore were removed and the rest of the stand was thinned. When it was cruised last, a good stand of pecan, sycamore and hackberry was growing on the area. Other species include cottonwood, ash, sweetgum and other miscellaneous species. Growth rate of the stand was fair.

Stand Recommendations

This stand will be managed for mixed hardwood production on a 55-year rotation. During this time, management activities such as thinning to remove poor quality trees and improve growth, and controlling undesirable species will be done to keep stands at full production.

Activity Recommendations

Harvest

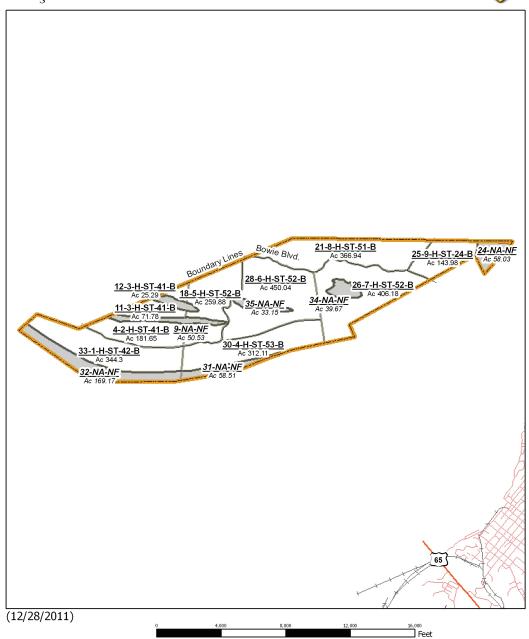
An intermediate cut or thinning should be conducted in FY 2019 to maintain the growth of the stand. This would be a thinning from below where most of the trees to be cut would come from the lower crown classes. The large cottonwood would be removed since they are short lived. Most of the reserve and preferred growing stock would be left to grow.



NATCHEZ-ADAMS SCHOOL DISTRICT

S5, T7N, R3W, ADAMS COUNTY, MS-GILES ISLAND 2012 to 2021 3001 +/- ACRES





S5, T7N, R3W, ADAMS COUNTY-LEGEND



Property	Category 1: Stands (cont)
Property	Sawtimber
Category 1: Stands	Poles
Clear Cut	Category 2: Stands
Non-Stocked	Clear Cut
Reproduction	Non-Stocked
Sub-Merchantable	Reproduction
Pulpwood	Sub-Merchantable
Chip-n-Saw	Pulpwood



Stand Activity Summary for Natchez-Adams School District 5 7N 3W

Filters Applied: County: Adams

Client Class: District:

Client: Natchez-Adams School Dis

STR: 5 7N 3W

Activity:

Year: 2012 Through 2021

						Ü
STR	Strata	Stand	Activity		Est. Cost	Est. Revenue
2013						
5 7N 3W	3	11	Harvest, Mechanical, Thin, Machine, Misc Hardwood		\$1,800.00	\$14,022.72
5 7N 3W	3	12	Harvest, Mechanical, Thin, Machine, Misc Hardwood		\$632.25	\$4,925.48
			Yearly Totals	97	\$2,432.25	\$18.948.20
2014						
5 7N 3W	2	4	Harvest, Mechanical, Thin, Machine, Misc Hardwood	182	\$2,548.00	\$33,087.60
5 7N 3W	8	21	Harvest, Mechanical, Thin, Machine, Misc Hardwood	367	\$9,175.00	\$148,268.00
			Yearly Totals	549	\$11.723.00	\$181.355.60
2015						
5 7N 3W	1	33	Harvest, Mechanical, Thin, Machine, Misc Hardwood	344	\$8,600.00	\$22,084.80
		_	Yearly Totals	344	\$8,600.00	\$22,084.80
2016						
5 7N 3W	5	18	Harvest, Mechanical, Thin, Machine, Misc Hardwood	260	\$6,500.00	\$56,368.00
			Yearly Totals	260	\$6.500.00	\$56.368.00
2017						
5 7N 3W	6	28	Harvest, Mechanical, Thin, Machine, Misc Hardwood	450	\$11,250.00	\$79,200.00
		_	Yearly Totals	450	\$11,250.00	\$79,200.00
2018						
5 7N 3W	4	30	Harvest, Mechanical, Thin, Machine, Misc Hardwood	312	\$6,240.00	\$27,144.00
5 7N 3W	7	26	Harvest, Mechanical, Thin, Machine, Misc Hardwood	406	\$10,150.00	\$63,011.20

STR	Strata	Stand		Activity	Acre	Est. Cost	Est. Revenue
				Yearly Totals	718	\$16,390.00	\$90,155.20
2019							
5 7N 3W	9	25	Harvest, Mechanica	ıl, Thin, Machine, Misc Hardwood	144	\$3,600.00	\$46,656.00
				Yearly Totals	144	\$3,600.00	\$46,656.00
				Grand Totals	2.562	\$60,495.25	\$494,767.80